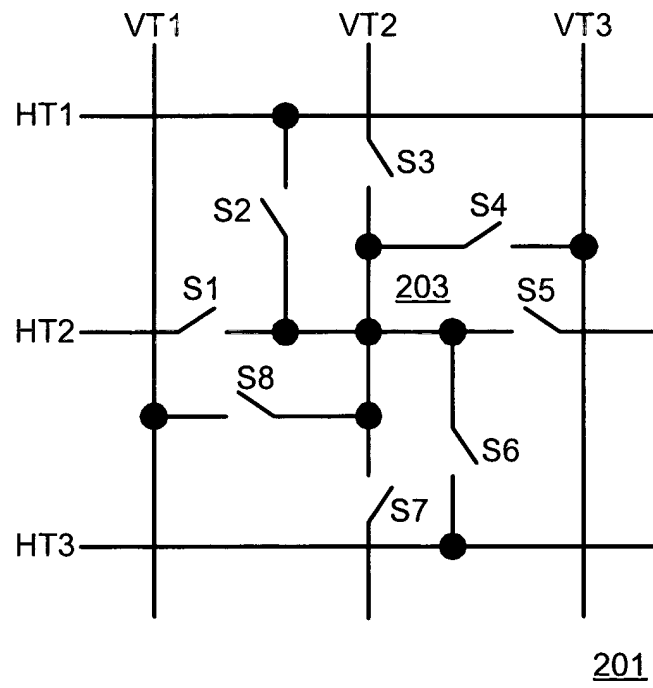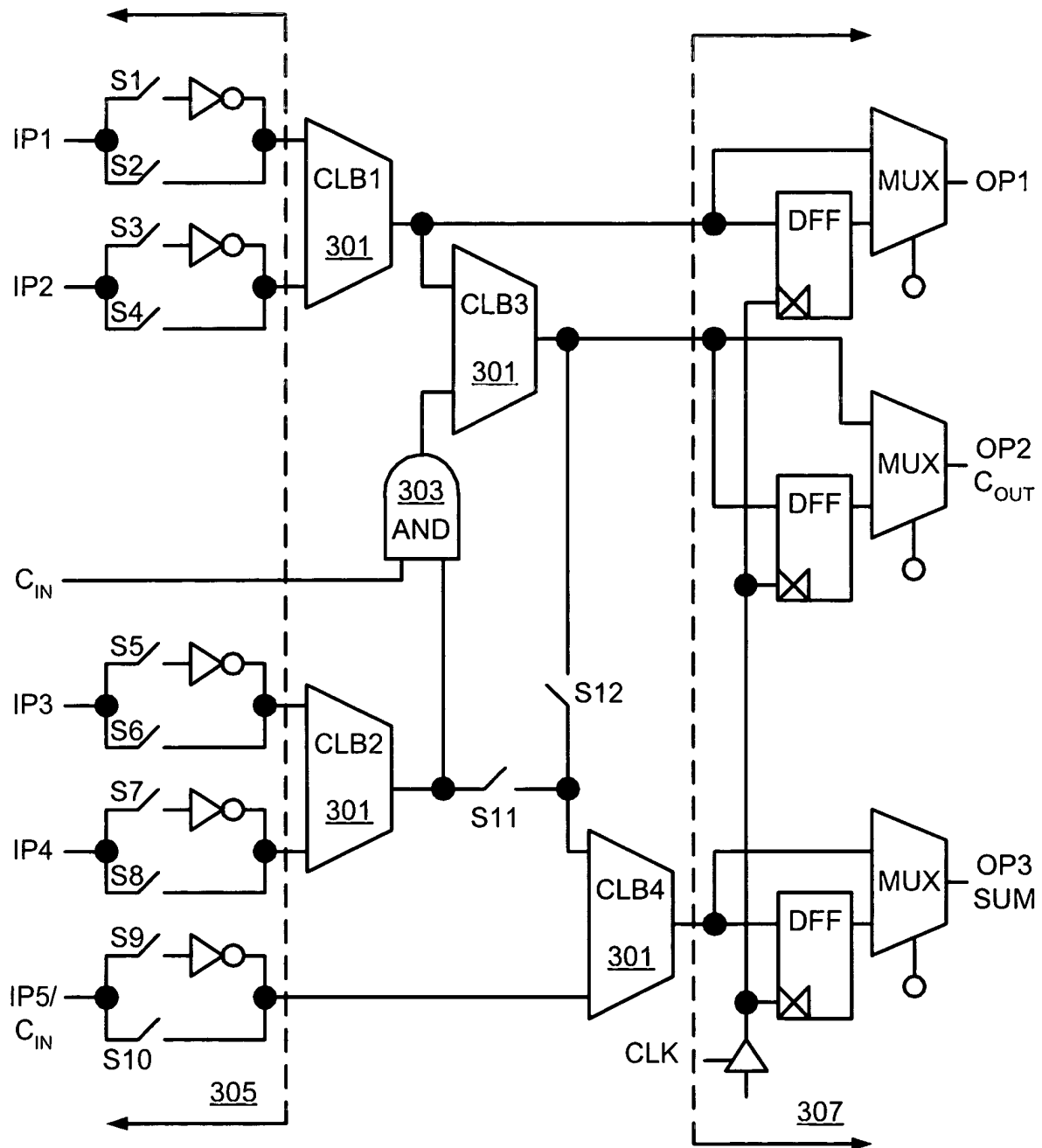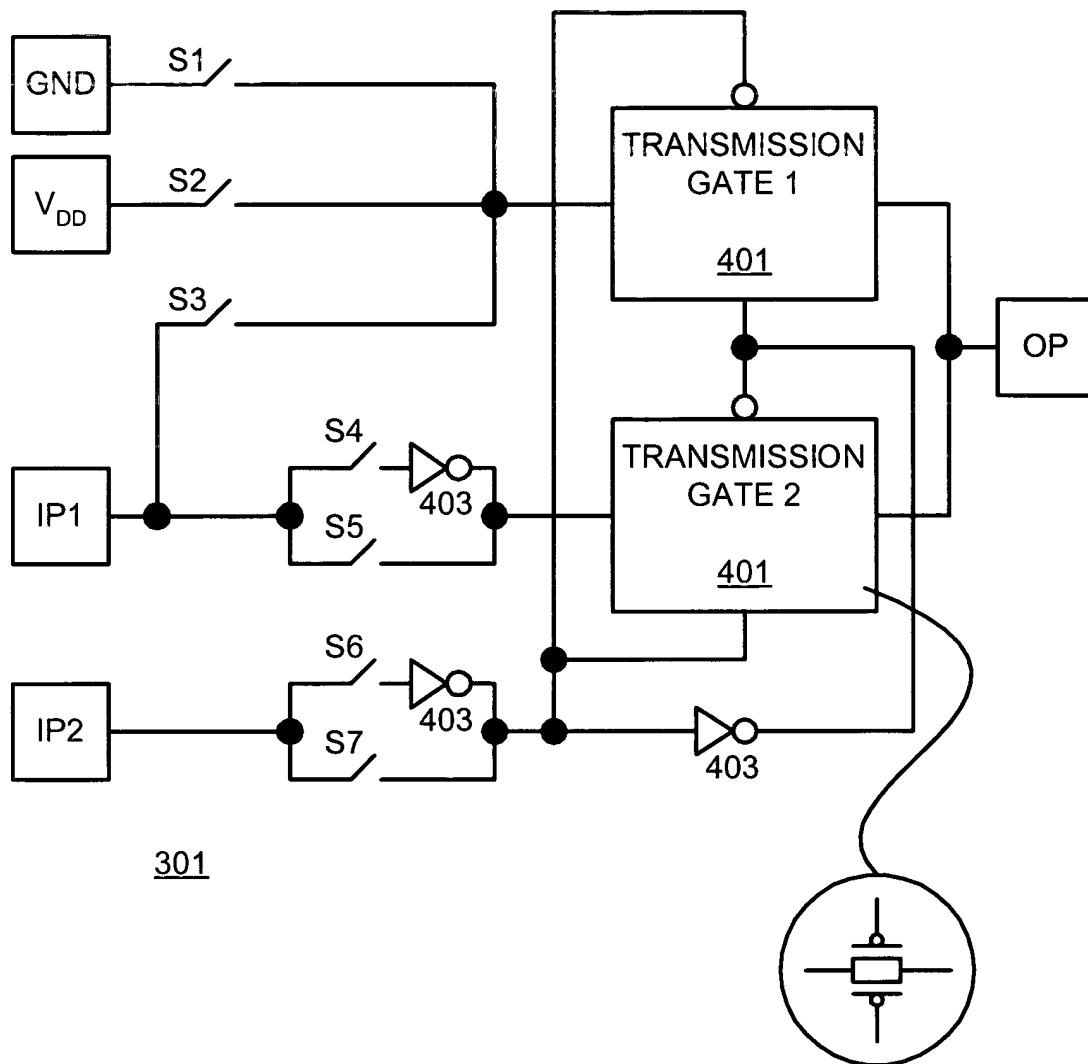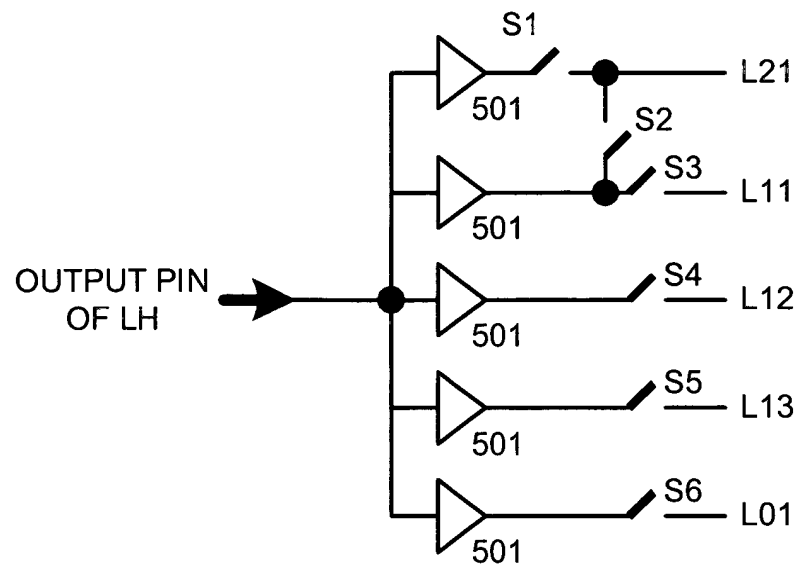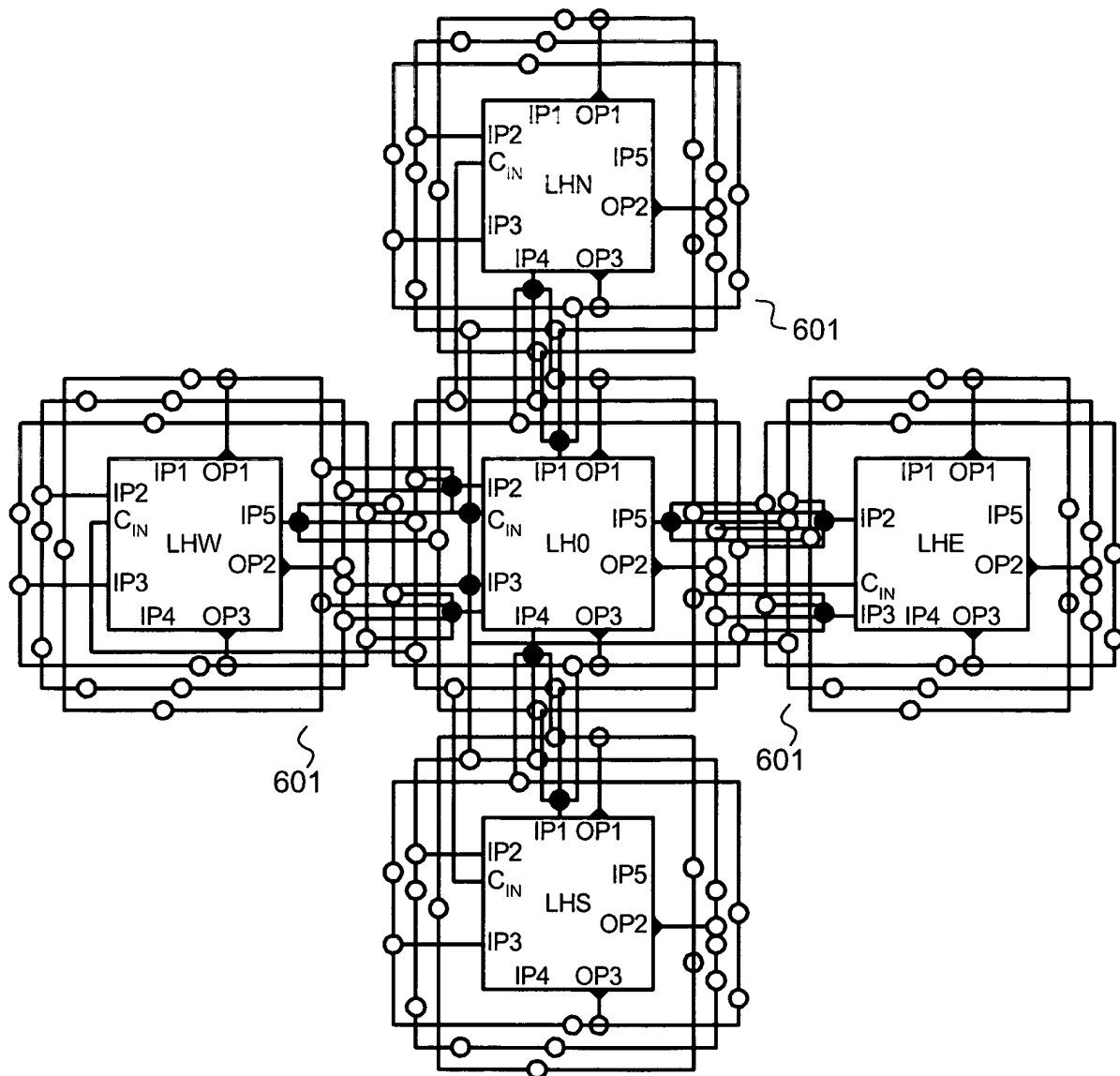**FIGURE 1**

FIGURE 2

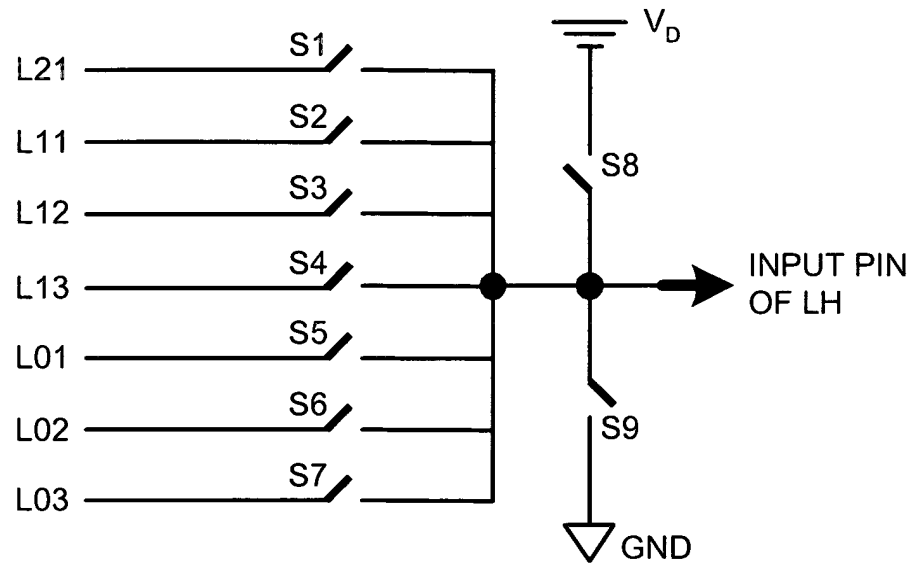CLB : CASCADABLE LOGIC BLOCK

FIGURE 3

FIGURE 4

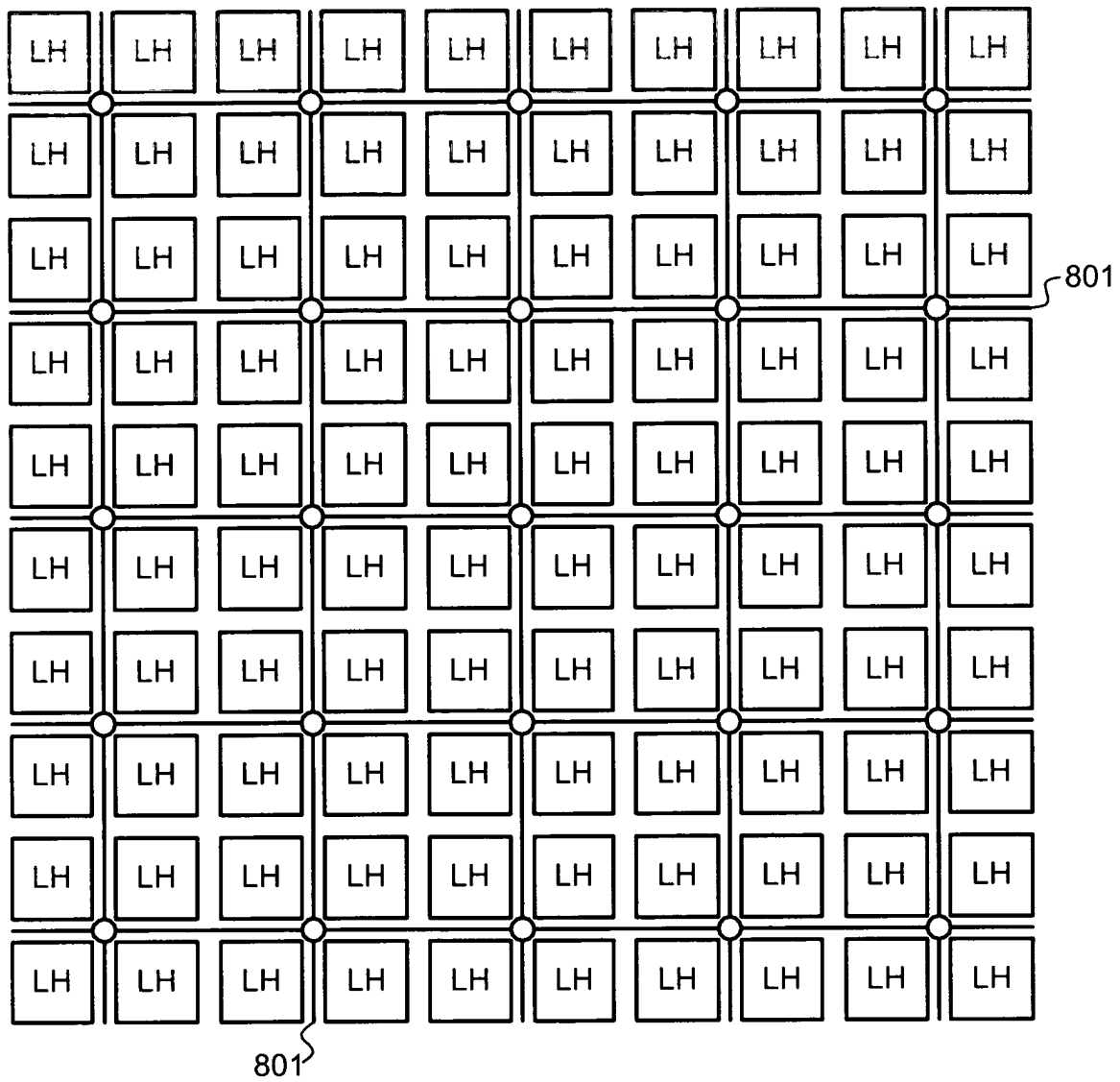**FIGURE 5**

O PASS TRANSISTOR OR SWITCH
● HARD WIRED
▼ BUFFER

FIGURE 6

FIGURE 7
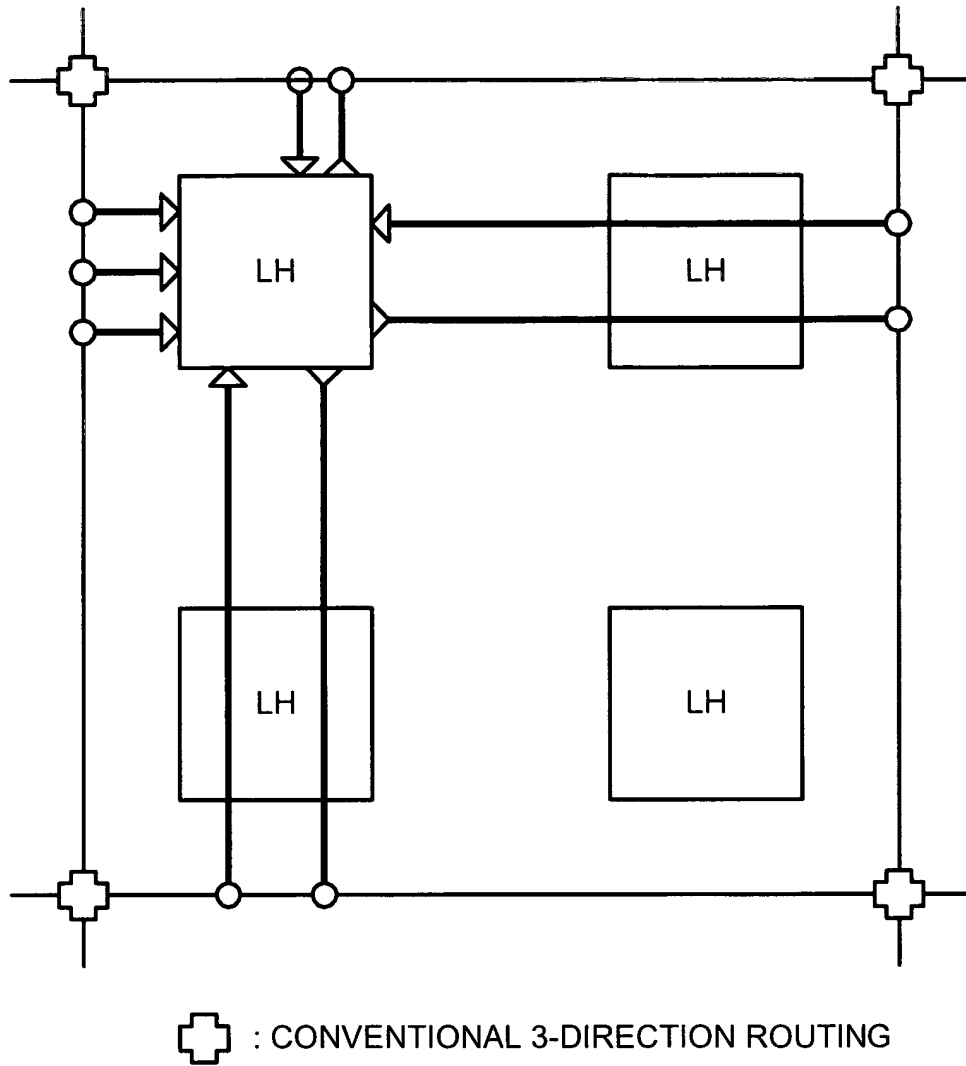
FIGURE 8

SWITCH	S1	S2	S3	S4	S5	S6	S7	EQUATION
AND2	✓	✗	✗	✗	✓	✗	✓	OP = IP1 & IP2
NAND2	✗	✓	✗	✓	✗	✗	✓	OP = !(IP1 & IP2)
OR2	✗	✓	✗	✗	✓	✓	✗	OP = IP1 | IP2
NOR2	✓	✗	✗	✓	✗	✓	✗	OP = !(IP1 | IP2)
XOR2	✗	✗	✓	✓	✗	✗	✓	OP = (IP1 & !IP2) | (!IP1 & IP2)
XNOR2	✗	✗	✓	✓	✗	✓	✗	OP = (IP1 & IP2) | (!IP1 & !IP2)

NOTE: ✓ : SWITCH ON   ✗ : SWITCH OFF

FIGURE 9

: CONVENTIONAL 3-DIRECTION ROUTING

FIGURE 10